

ColorBeam2500E AT - DMX protocol

Version 1.1

Mode / Channel 1 2		Value	Function	Type of control
1	1	0 - 255	Pan Pan movement by 530°	proportional
2	2	0 - 255	Pan Fine Fine control of pan movement	proportional
3	3	0 - 255	Tilt Tilt movement by 260°	proportional
4	4	0 - 255	Tilt fine Fine control of tilt movement	proportional
5	5	0	Pan/Tilt speed , Pan/Tilt time Max. speed (tracking mode)*	step
		1 - 255	P./T. speed-set Speed Mode in menu: Pan/Tilt Mode Speed from max. to min. (vector mode)**	proportional
		1 - 255	P./T. time - set Time Mode in menu: Pan/Tilt Mode Time from 0,1 s to 25,5 s. ***	proportional
6	6	0 - 49	Power/Special functions Reserved To activate following functions, stop in DMX value for at least 3 s and shutter must be closed at least 3 s. („Shutter,Strobe” channel 23 (29) must be at range: 0-31 DMX).****	
		50 - 59	Pan/Tilt speed mode	step
		60 - 69	Pan/Tilt time mode	step
		70 - 79	Blackout while pan/tilt moving	step
		80 - 89	Disabled blackout while pan/tilt moving	step
		90 - 99	Blackout while colour wheel moving	step
		100 - 109	Disabled blackout while colour wheel moving	step
		110 - 119	Blackout while gobo 1/gobo 2 moving	step
		120 - 129	Disabled blackout while gobo 1/gobo 2 moving	step
			<i>To activate following functions, stop in DMX value for at least 3 s.</i>	
		130 - 139	Lamp On,reset(total reset except pan/tilt reset)	step
		140 - 149	Pan/Tilt reset	step
		150 - 159	Colour system reset	step
		160 - 169	Gobo system reset	step
		170 - 179	Dimmer/Strobe reset	step
		180 - 189	Focus/Zoom/Frost reset	step
		190 - 199	Iris/Prism reset	step
		200 - 209	Total reset	step
		210 - 229	Reserved	step
		230 - 239	Lamp Off	step
		240 - 255	Reserved	step

Notes: * Range 0-255 DMX at max.speed (0 DMX):

pan=4.5 s

tilt=3.6 s

** Range 0-255 DMX at min. speed (255 DMX):

pan=37min.10 s

tilt=19 min.34 s

*** Short times are not used for long tracks (e.g. 0.5s for track 0-255 DMX). Times are restricted by mechanical parameters of the fixture.

**** The switch-functions have priority to the equivalent functions in menu „Personality” but the setting by DMX is not saved to the memory (after switching the fixture on,the setting from menu „Personality” is loaded and after that can be changed by DMX value on the channel 6).

DMX protocol

50 - 59 Pan/Tilt speed mode
60 - 69 Pan/Tilt time mode
70 - 79 Blackout while pan/tilt moving
80 - 89 Disabled blackout while pan/tilt moving
90 - 99 Blackout while colour wheel moving
100 - 109 Disabled blackout while colour wheel moving
110 - 119 Blackout while gobo1/gobo2 moving
120 - 129 Disabled blackout while gobo1/gobo2moving

menu „Personality”

Pan/Tilt mode--->Speed Mode
Pan/Tilt mode--->Time Mode
Active blackout While-->Pan/Tilt Moving-->On
Active blackout While-->Pan/Tilt Moving-->Off
Active blackout While-->Colour Wheel Moving-->On
Active blackout While-->Colour Wheel Moving-->Off
Active blackout While-->Gobo Wheels Moving-->On
Active blackout While-->Gobo Wheels Moving-->Off

Mode / Channel 1 2		Value	Function	Type of control
	7	0 - 9 10 - 31 32 - 63 64 - 95 96 - 127 128 - 159 160 - 191 192 - 223 224 - 255	Pan/Tilt macro selection Disabled pan/tilt macro Reserved Figure of circle (from small to large) Figure of horizontal eight (from small to large) Figure of vertical eight (from small to large) Figure of rectangle (from small to large) Figure of triangle (from small to large) Figure of star (from small to large) Figure of cross (from small to large)	step step proportional proportional proportional proportional proportional proportional proportional
	8	0 1 - 127 128 - 129 130 - 255	Pan/Tilt macro speed No macro generation Macro generation from fast to slow-forwards No macro generation Macro generation from slow to fast-backwards	step proportional step proportional
7	9	0 18 37 55 73 91 110 128 - 129 130 - 139 140 - 149 150 - 159 160 - 169 170 - 179 180 - 189 190 - 215 216 - 217 218 - 243 244 - 249 250 - 255	Colour wheel Open/white Deep red Deep blue Green Orange 6000 K temperature filter UV filter White Deep red Deep blue Green Orange 6000 K temperature filter UV filter Forwards rainbow effect from fast to slow No rotation Backwards rainbow effect from slow to fast Random colour selection by audio control (Set microphone sensitivity in menu „Personality”) Auto random colour selection from fast to slow	proportional proportional proportional proportional proportional proportional proportional proportional step step step step step step step proportional step proportional step proportional
8	10	0 - 255	Cyan Cyan (0-white, 255-full cyan)	proportional
9	11	0 - 255	Magenta Magenta (0-white, 255-full magenta)	proportional
10	12	0 - 255	Yellow Yellow (0-white, 255-full yellow)	proportional
11	13	0 - 255	Conversion temperature filter 3200K (0-5600K, 255-3200K)	proportional
	14	0 - 3 4 - 7 8 - 11 12 - 15 16 - 19 20 - 23 24 - 27 28 - 31 32 - 35 36 - 39 40 - 43 44 - 47 48 - 51 52 - 55 56 - 59 60 - 63 64 - 67 68 - 71	CMY Colour macros No function Macro 1 Macro 2 Macro 3 Macro 4 Macro 5 Macro 6 Macro 7 Macro 8 Macro 9 Macro 10 Macro 11 Macro 12 Macro 13 Macro 14 Macro 15 Macro 16 Macro 17	step step step step step step step step step step step step step step step step step step

Mode / Channel 1 2		Value	Function	Type of control
13	17	34 - 37	Rotation - set rotation on channel(s) 14 (18,19;9,10) Gobo 1	step
		38 - 41	Gobo 2	step
		42 - 45	Gobo 3	step
		46 - 49	Gobo 4	step
		50 - 53	Gobo 5	step
		54 - 57	Gobo 6	step
			Shaking gobos from slow to fast Index - set indexing on channel(s) 14 (18, 19;9,10) Gobo 1	proportional
		58 - 69	Gobo 2	proportional
		70 - 81	Gobo 3	proportional
		82 - 93	Gobo 4	proportional
		94 - 105	Gobo 5	proportional
		106 - 117	Gobo 6	proportional
		118 - 129		
			Shaking gobos from slow to fast Rotation - set rotation on channel(s) 14 (18,19;9,10) Gobo 1	proportional
		130 - 141	Gobo 2	proportional
		142 - 153	Gobo 3	proportional
		154 - 165	Gobo 4	proportional
		166 - 177	Gobo 5	proportional
		178 - 189	Gobo 6	proportional
		190 - 201	Forwards gobo wheel 1 rotation from fast to slow	proportional
		202 - 221	No rotation	
		222 - 223	Backwards gobo wheel 1 rotation from slow to fast	proportional
		224 - 243	Random gobo 1 selection by audio control (Set microphone sensitivity in menu „Personality“)	step
		244 - 249	Auto random gobo 1 selection from fast to slow	proportional
		250 - 255		
14	18	0 - 255	Gobo 1 indexing and rotation Gobo indexing - set position on channel 13 (17) Gobo indexing	proportional
		0	Gobo rotation - set position on channel 13 (17) No rotation	step
		1 - 127	Forwards gobo rotation from fast to slow	proportional
		128 - 129	No rotation	step
		130 - 255	Backwards gobo rotation from slow to fast	proportional
	19		Gobo 1 fine indexing and rotation (set position on channel 13 (17)) Fine indexing (rotating)	proportional
		0 - 255		
			Rotating gobo wheel 2 Index - set indexing on channel(s) 16 (21, 22) Open/hole	step
		0 - 9	Gobo 1	step
		10 - 13	Gobo 2	step
		14 - 17	Gobo 3	step
		18 - 21	Gobo 4	step
		22 - 25	Gobo 5	step
		26 - 29	Gobo 6	step
		30 - 33		
			Rotation - set rotation on channel(s) 16 (21, 22) Gobo 1	step
		34 - 37	Gobo 2	step
		38 - 41	Gobo 3	step
		42 - 45	Gobo 4	step
		46 - 49	Gobo 5	step
		50 - 53	Gobo 6	step
		54 - 57		
			Shaking gobos from slow to fast Index - set indexing on channel(s) 16 (21, 22) Gobo 1	proportional
		58 - 69	Gobo 2	proportional
		70 - 81	Gobo 3	proportional
		82 - 93	Gobo 4	proportional
		94 - 105	Gobo 5	proportional
		106 - 117	Gobo 6	proportional
		118 - 129		

Mode / Channel 1 2		Value	Function	Type of control
15	20	130 - 141 142 - 153 154 - 165 166 - 177 178 - 189 190 - 201 202 - 221 222 - 223 224 - 243 244 - 249 250 - 255	Shaking gobos from slow to fast Rotation - set rotation on channel(s) 16(21,22) Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Forwards gobo wheel 2 rotation from fast to slow No rotation Backwards gobo wheel 2 rotation from slow to fast Random gobo 2 selection by audio control (Set microphone sensitivity in menu „Personality“) Auto random gobo 2 selection from fast to slow	proportional proportional proportional proportional proportional proportional step proportional step proportional
16	21	0 - 255 0 1 - 127 128 - 129 130 - 255	Gobo 2 indexing and rotation Gobo indexing - set position on channel 15 (20) Gobo indexing Gobo rotation - set position on channel 15 (20) No rotation Forwards gobo rotation from fast to slow No rotation Backwards gobo rotation from slow to fast	proportional step proportional step proportional
	22	0 - 255	Gobo 2 fine indexing and rotation (set position on channel 15 (20)) Fine indexing (rotating)	proportional
17	23	0-19 20 - 127 128 - 135 136 - 143 144-151 152 - 159 160 - 167 168 - 175 176 - 183 184-191 192 - 199 200- 207 208 - 215 216 - 223 224 - 231 232 - 239 240 - 247 248 - 255	Prism Open/hole 6-facet rotating prism Prism/gobo macros Macro 1 Macro 2 Macro 3 Macro 4 Macro 5 Macro 6 Macro 7 Macro 8 Macro 9 Macro 10 Macro 11 Macro 12 Macro 13 Macro 14 Macro 15 Macro 16	step step step step step step step step step step step step step step step
18	24	0 1 - 127 128 - 129 130 - 255	Prism rotation No rotation Forwards Effect rotation from fast to slow No rotation Backwards Effect rotation from slow to fast	step proportional step proportional
19	25	0 1 - 179 180 - 189 190 - 211 212 - 233 234 - 255	Frost Open Frost from 0% to 100% 100% frost Pulse closing from slow to fast Pulse opening from fast to slow Ramping from fast to slow	step proportional proportional proportional proportional

Mode / Channel 1 2		Value	Function	Type of control
20	26	0 1 - 179 180 - 191 192 - 219 220 - 247 248 - 249 250 - 251 252 - 253 254 - 255	Iris Open From max. diameter to min. diameter Closed Pulse effects with Iris blackout Pulse opening from slow to fast Pulse closing from fast to slow Random pulse opening (fast) Random pulse opening (slow) Random pulse closing (fast) Random pulse closing (slow)	step proportional step proportional proportional step step step step
21	27	0 - 84 85-169 170-255	Zoom Zoom 6.5° Zoom 8.2° Zoom 10°	step step step
22	28	0 - 255	Focus Continuous adjustment from far to near	proportional
23	29	0 - 31 32 - 63 64 - 95 96 - 127 128 - 143 144 - 159 160 - 191 192 - 223 224 - 255	Shutter, strobe Shutter closed, Lamp power reduced to 800W Shutter open, Full lamp power Strobe-effect from slow to fast (max.15 flashes/s) Shutter open, Lamp power reduced to 800 W Opening pulse in sequences from slow to fast Closing pulse in sequences from fast to slow Shutter open, Electronic strobing „ZAP“ from slow to fast (from 7 to 33 flashes/s) Random strobe-effect from slow to fast Shutter open, Full lamp power	step step proportional step proportional proportional proportional proportional step
24	30	0 - 255	Dimmer intensity Dimmer intensity from 0% to 100%	proportional
	31	0 - 255	Fine dimmer intensity Dimmer intensity fine	proportional